

### **LISTING OF CLAIMS:**

Claim 1 (Currently amended): Pyrogenically produced oxides of metals or metalloids which oxides are particles and are doped by means of aerosol with a potassium salt solution, characterized in that the particle base component is an oxide that is pyrogenically produced by flame oxidation or flame hydrolysis and was doped with potassium from ~~0.000001~~ 0.03% to 20 % by wt. and the doping component is a salt of potassium, the ~~BET surface of the~~ doped oxide particles have a BET surface ~~[[is]]~~ between 1 and 1000 m<sup>2</sup>/g and the breadth of the distribution of particle size is at least 0.7.

Claim 2 (Previously presented): The pyrogenically produced oxides of metals or metalloids in accordance with claim 1, further characterized in that the pH of the doped, pyrogenic oxide is more than 5, measured in a 4 % aqueous dispersion.

Claim 3 (Currently amended): The pyrogenically produced oxides of metals or metalloids in accordance with claim 1, further characterized in the doping amount is in a range of ~~[[1]]~~ 500 to 20,000 ppm and the absorption of dibutylphthalate does not allow any end point to be recognized.

Claim 4 (Currently amended): A method of producing potassium-doped pyrogenic oxides comprising sequentially feeding a gaseous mixture, including a pyrogenic oxide precursor, and an aerosol to form an aerosol-gaseous mixture, which is fed into a flame under conditions suitable for producing pyrogenic oxides by flame oxidation or flame hydrolysis from the precursor, to form the potassium-doped pyrogenic oxides, and separating the formed pyrogenic-doped oxides, which have BET surface of the doped oxide is between 1 and 1000 m<sup>2</sup>/g and the

breadth of the distribution of particle size is at least 0.7, from the reacted aerosol-gaseous mixture, wherein the aerosol is homogeneously mixed before the reaction with the gaseous mixture and is prepared from a potassium chloride salt solution having a concentration of more than 0.5%.

Claim 5 (Previously presented): A composition comprising doped pyrogenic oxides in accordance with claim 1 suitable for use as a polishing agent.

Claim 6 (Previously presented): The method of claim 4 wherein the aerosol is produced by atomization by means of an aerosol generator.

Claim 7 (Previously presented): The method of claim 6 wherein the atomization involves a gas-atomizing (two-fluid) nozzle method.

Claim 8 (Canceled)

Claim 9 (Previously presented): The method of claim 4 wherein the pyrogenic-doped oxide particles have a potassium content of more than about 0.03% by weight.

Claim 10 (Previously presented): A method of producing potassium-doped pyrogenic oxides consisting essentially of sequentially feeding a gaseous mixture, including a pyrogenic oxide precursor, and an aerosol to form an aerosol-gaseous mixture, which is fed into a flame under conditions suitable for producing pyrogenic oxides by flame oxidation or flame hydrolysis from the precursor, to form the potassium-doped pyrogenic oxides, and separating the formed pyrogenic-doped oxides, which have BET surface of the doped oxide is between 1 and 1000 m<sup>2</sup>/g

and the breadth of the distribution of particle size is at least 0.7, from the reacted aerosol-gaseous mixture, wherein the aerosol is homogeneously mixed before the reaction with the gaseous mixture and is prepared from a potassium salt solution.

Claim 11 (Previously presented): The method of claim 4 further comprising adding oxygen prior to the separation step.